

ABSTRACT:

In a method of measuring, in a lithographic manufacturing process using a lithographic projection apparatus, overlay between a resist layer (RL), in which a mask pattern (C) is to be imaged, and a substrate (W), use is made of an alignment-measuring device (AS_1 , AS_2) forming part of the apparatus and of specific overlay marks (P_{10} , P_{11}) in the substrate and resist layer. These marks have periodic structures with periods (PE_{10} , PE_{11}) which cannot be resolved by the alignment device, but generate an interference pattern (P_b) having a period (PE_b) corresponding to the period of a reference mark (M_1 ; M_2) of the alignment device.

10 Fig.5